

-continued

595					600					605						
Ser	Thr	Asp	Asp	Ile	Trp	Gly	Asn	Leu	Thr	Trp	Gln	Gln	Trp	Asp	Lys	
610					615					620						
Leu	Val	Ser	Asn	Tyr	Thr	Gly	Lys	Ile	Phe	Gly	Leu	Leu	Glu	Glu	Ala	
625					630					635					640	
Gln	Ser	Gln	Gln	Glu	Lys	Asn	Glu	Arg	Asp	Leu	Leu	Glu	Leu	Asp	Gln	
					645					650					655	
Trp	Ala	Ser	Leu	Trp	Asn	Trp	Phe	Asp	Ile	Thr	Lys	Trp	Leu	Trp	Tyr	
					660					665					670	
Ile	Lys	Ile	Phe	Leu	Met	Ala	Val	Gly	Gly	Ile	Ile	Gly	Leu	Arg	Ile	
					675					680					685	
Ile	Met	Thr	Val	Phe	Ser	Val	Val	Arg	Arg	Val	Arg	Gln	Gly	Tyr	Ser	
690					695					700						
Pro	Leu	Ser	Leu	Gln	Thr	Leu	Ile	Pro	Val	Gln	Arg	Glu	Gln	Gly	Arg	
705					710					715					720	
Leu	Gly	Glu	Ile	Asp	Glu	Gly	Gly	Gly	Glu	Gln	Asp	Arg	Ser	Arg	Ser	
					725					730					735	
Val	Arg	Leu	Val	Glu	Gly	Cys	Leu	Pro	Leu	Ile	Trp	Asp	Asp	Leu	Arg	
					740					745					750	
Asn	Leu	Gly	Ile	Trp	Ser	Tyr	Gln	Ser	Leu	Thr	Ser	Leu	Ala	Cys	Asn	
					755					760					765	
Val	Trp	Arg	Gln	Leu	Lys	Thr	Leu	Gly	His	Leu	Ile	Leu	His	Ser	Leu	
					770					775					780	
Arg	Leu	Leu	Arg	Glu	Arg	Leu	Cys	Leu	Leu	Gly	Gly	Ile	Ile	Gln	Tyr	
785					790					795					800	
Trp	Gly	Lys	Glu	Leu	Lys	Ile	Ser	Ala	Ile	Ser	Leu	Leu	Asp	Ala	Thr	
					805					810					815	
Ala	Ile	Ala	Val	Ala	Glu	Gly	Thr	Asp	Arg	Ile	Ile	Glu	Ala	Phe	Gln	
					820					825					830	
Val	Thr	Leu	Arg	Ile	Ile	Arg	Asn	Ile	Pro	Arg	Arg	Ile	Arg	Gln	Gly	
					835					840					845	
Leu	Glu	Arg	Ala	Leu	Leu											
850																

1. An engineered or non-naturally occurring molecule from Simian Immunodeficiency Virus (SIV) that binds to a Human Immunodeficiency Virus (HIV) broadly neutralizing antibody (bnAb), in particular the V2 apex region of HIV envelope, or an engineered or non-naturally occurring molecule from SIV that binds to a germline or germline reverted HIV broadly neutralizing antibody (bnAb) directed to the V2 apex region of HIV envelope.

2.-3. (canceled)

4. The engineered or non-naturally occurring molecule of claim 1,

wherein the HIV bnAb comprises one or more complementarity determining regions (CDRs) of a heavy chain variable domain of Table 2, and/or one or more CDRs of a light chain variable domain of Table 2, in particular wherein the HIV bnAB comprises an amino acid sequence at least 50% identical, at least 55%, at least 60%, at least 65%, at least 70%, at least 75%, at least 80%, at least 85%, at least 86%, at least 87%, at least 88%, at least 89%, at least 90%, at least 91%, at least

92%, at least 93%, at least 94%, at least 95%, at least 96%, at least 97%, at least 98% or at least 99% identical to PG9 or to CH01, or which comprises a complex of gp120 and gp41, or variants thereof or which comprises a stabilized trimer, in particular wherein the trimer is a SOSIP, NFL, or UFO trimer or which comprises a V2 apex epitope of Simian Immunodeficiency Virus (SIV) or wherein the SIV comprises SIVcpzPtt, SIVcpzPts, or SIVgor or wherein the Env sequence of the SIV is from the SIVcpzPtt isolate MT145 or wherein an immunodominant epitope is modified by deletion or substitution, in particular wherein amino acids of the V5 loop are substituted or deleted or which comprises basic amino acid substitutions, in particular which comprises Lys at position 171 or wherein the V2 apex region comprises two glycans and four consecutive basic amino acids.

5.-16. (canceled)